

‘When I see a tomato there is much that I *can doubt*.’ This suggests that he too is really interested, not so much in what seeing is, as in what one *can’t* doubt.

In a nutshell, the doctrine about knowledge, ‘empirical’ knowledge, is that it has *foundations*. It is a structure the upper tiers of which are reached by inferences, and the foundations are the *data* on which these inferences are based. (So of course—as it appears—there just have to be sense-data.) Now the trouble with inferences is that they may be mistaken; whenever we take a step, we may put a foot wrong. Thus—so the doctrine runs—the way to identify the upper tiers of the structure of knowledge is to ask whether one might be mistaken, whether there is something that one *can doubt*; if the answer is Yes, then one is not at the basement. And conversely, it will be characteristic of the *data* that in their case no doubt is possible, no mistake can be made. So to find the data, the foundations, look for *the incorrigible*.

Now of course Ayer’s exposition of this very old story is (or at any rate was when it was written) very up-to-date, very linguistic. He constantly reproves Price and his other predecessors for treating as questions of fact what are really questions of language. However, as we have seen, this relative sophistication does not prevent Ayer from swallowing whole almost all the old myths and mistakes incorporated in the traditional arguments. Also, as we have seen, it is not really true that he himself believes the questions raised to be questions about language, though this is his official doctrine. And finally, as

X

THE PURSUIT OF THE INCORRIGIBLE IS ONE of the most venerable bugbears in the history of philosophy. It is rampant all over ancient philosophy, most conspicuously in Plato, was powerfully re-animated by Descartes, and bequeathed by him to a long line of successors. No doubt it has many motives and takes many forms, and naturally we can’t go into the whole story now. In some cases the motive seems to be a comparatively simple hankering for something to be *absolutely certain*—a hankering which can be difficult enough to satisfy if one rigs it so that certainty is absolutely unattainable; in other cases, such as Plato’s perhaps, what is apparently sought for is something that will be *always true*. But in the case now before us, which descends directly from Descartes, there is an added complication in the form of a general doctrine about knowledge. And it is of course knowledge, not perception at all, in which these philosophers are really interested. In Ayer’s case this shows itself in the title of his book, as well as, *passim*, in his text; Price is more seriously interested than is Ayer in the actual facts about perception, and pays more attention to them—but still, it is worth noticing that, after raising the initial question, ‘What is it to *see* something?’, his very next sentence runs,

we shall see in a moment, the doctrine that the questions *are* questions about language leads him, in the course of expounding it, to make about language a number of rather serious mistakes.

But before going into this, I should like to say one word more about this rift between Ayer's official views and his actual views. We detected it, earlier, in the second section of his book—to wit, in the startling conviction that there are no real facts about 'material things', we can say what we like about *them*, the only facts there really are are facts about 'phenomena', 'sensible appearances'. But the belief that really there *are* only sense-data emerges again, more clearly and much more frequently, in the final chapter, significantly entitled 'The Constitution of Material Things'. ('What are material things made of?') For example: 'As for the belief in the "unity" and "substantiality" of material things, I shall show that it may be correctly represented as involving no more than the attribution to visual and tactual sense-data of certain relations which do, *in fact*, obtain in our experience. And I shall show that it is only the contingent *fact that there are* these relations between sense-data that makes it *profitable to describe* the course of our experience in terms of the existence and behaviour of material things.' (The italics are mine.) Again: 'I can describe the task I am about to undertake as that of showing what are the general principles on which, *from our resources of sense-data*, we "construct" the world of material things.' Of course, the official interpretation of these and many other such

remarks is that, strictly speaking, they are concerned with the logical relations obtaining between two different *languages*, the 'sense-datum language' and 'material-object language', and are not to be taken literally as concerned with the *existence* of anything. But it is *not* just that Ayer sometimes speaks *as if* only sense-data in fact existed, and *as if* 'material things' were really just jig-saw constructions of sense-data. It is clear that he is actually taking this to be true. For he holds without question that empirical 'evidence' is supplied *only* by the occurrence of sense-data, and that it is *for this reason* that 'any proposition that refers to a material thing *must somehow* be expressible in terms of sense-data, if it is to be empirically significant'. (My italics again.) That is, the official question, how these two supposed 'languages' may be related to one another, is never regarded as genuinely open; the material-object language *must somehow* be 'reducible' to the sense-datum language. Why? Because in fact sense-data make up the whole of 'our resources'.

But we must go a bit further into this doctrine about 'two languages'. On this topic Ayer becomes involved in a *fracas* with Carnap, and it will be instructive to see how the argument between them goes.¹

Carnap's doctrine on this subject, with which Ayer finds himself in partial disagreement, is to the effect that the (legitimate) indicative sentences of a language, other than those which are analytic, can be divided into two

¹ Ayer, *op. cit.*, pp. 84-92, 113-14.

groups, one group consisting of 'empirically testable' sentences, the other of 'observation-sentences', or 'protocols'. A sentence belongs to the first group, is empirically testable, if and only if, as Ayer puts it, some observation-sentence is 'derivable from it in accordance with the established rules of the language'. About these observation-sentences themselves Carnap has two things to say. He says (a) that it is fundamentally just a matter of convention which observation-sentences are taken to be true; all we need bother about is to fix it so that the total corpus of sentences we assert is internally consistent; and (b) that it doesn't much matter what sort of sentence we classify as an observation-sentence; for 'every concrete sentence belonging to the physicalistic system-language can in suitable circumstances serve as an observation-sentence'.

Now Ayer disagrees with Carnap on both of these points. On the first he argues, vehemently and perfectly correctly, that if anything we say is to have any serious claim to be in fact true (or even false) of the world we live in, then of course there have to be some things we say the truth (or falsehood) of which is determined by non-verbal reality; it can't be that everything we say has merely to be assessed for consistency with other things we say.

On the second point it is not *quite* so clear where Ayer stands. He holds—and this looks reasonable enough—that the only sentences which can properly be called 'observation-sentences' are those which record 'observable

states of affairs'. But what kind of sentences do this? Or, as Ayer puts it, is it possible 'to delimit the class of propositions that are capable of being directly verified'? The trouble is that it is not quite clear how he answers this question. He begins by saying that 'it depends upon the language in which the proposition is expressed'. There is evidently no serious doubt that propositions about sense-data can be directly verified. 'On the other hand, when we are teaching English to a child, we imply that propositions about material things can be directly verified.' Well, perhaps we do; but are we right in implying this? Ayer sometimes seems to say that we can at any rate get away with it: but it is difficult to see how he could really think so. For (apart from his tendency, already noted, to express the conviction that the only real facts are facts about sense-data) there is the point that observation-sentences are regarded by him, as by Carnap, as the *termini* of processes of verification; and Ayer repeatedly expresses the view that propositions about 'material things' not only stand in need of verification themselves, but are actually incapable of being 'conclusively' verified. Thus, unless Ayer were prepared to say that propositions which *can't* be 'conclusively' verified *can* be 'directly' verified, and furthermore that they can figure as *termini* in processes of verification, he must surely deny that propositions about material things can be 'observation-sentences'. And in fact it is fairly clear, from the general trend of his argument as well as from its internal structure, that he does deny this. In the terms

used by Carnap, his real view seems to be that propositions about 'material things' are 'empirically testable', propositions about sense-data are 'observation-sentences'; and whereas members of the first group are not conclusively verifiable, members of the second group are actually *incorrigible*.

We must now consider the rights and wrongs of all this. Ayer is right, we have said already, and Carnap wrong, on the question of connexion with non-verbal reality; the idea that nothing at all comes in but the consistency of sentences with each other is, indeed, perfectly wild. On the second question, however, Carnap is at least more nearly right than Ayer; there is indeed no special subclass of sentences whose business it is to count as evidence for, or to be taken as verifying, other sentences, still less whose special feature it is to be incorrigible. But Carnap is not *quite* right even about this; for if we consider just why he is nearly right, we shall see that the most important point of all here is one on which he and Ayer are both equally mistaken.

Briefly, the point is this. It seems to be fairly generally realized nowadays that, if you just take a bunch of sentences (or propositions,¹ to use the term Ayer prefers)

¹ The passage in which Ayer explains his use of this term (p. 102) obscures *exactly* the essential point. For Ayer says (a) that in his use 'proposition' designates a class of sentences that all have *the same meaning*, and (b) that 'consequently' he speaks of propositions, not sentences, as being true or false. But of course to know what a sentence *means* does not enable us to say that *it* is true or false; and that of which we can say that it is true or false is *not* a 'proposition', in Ayer's sense.

impeccably formulated in some language or other, there can be no question of sorting them out into those that are true and those that are false; for (leaving out of account so-called 'analytic' sentences) the question of truth and falsehood does not turn only on what a sentence *is*, nor yet on what it *means*, but on, speaking very broadly, the circumstances in which it is uttered. Sentences are not *as such* either true or false. But it is really equally clear, when one comes to think of it, that for much the same reasons there could be no question of picking out from one's bunch of sentences those that are evidence for others, those that are 'testable', or those that are 'incorrigible'. What kind of sentence is uttered as providing evidence for what depends, again, on the circumstances of particular cases; there is no kind of sentence which *as such* is evidence-providing, just as there is no kind of sentence which *as such* is surprising, or doubtful, or certain, or incorrigible, or true. Thus, while Carnap is quite right in saying that there is no special kind of sentence which *has* to be picked out as supplying the evidence for the rest, he is quite wrong in supposing that *any* kind of sentence *could* be picked out in this way. It is not that it doesn't much matter how we do it; there is really no question of doing such a thing at all. And thus Ayer is also wrong in holding, as he evidently does hold, that the evidence-providing kind of sentences are always sense-datum sentences, so that *these* are the ones that ought to be picked out.

This idea that there is a certain kind, or form, of

sentence which as such is incorrigible and evidence-providing seems to be prevalent enough to deserve more detailed refutation. Let's consider incorrigibility first of all. The argument begins, it appears, from the observation that there are sentences which can be identified as intrinsically more adventurous than others, in uttering which we stick our necks out further. If for instance I say 'That's Sirius', I am wrong if, though it is a star, that star is not Sirius; whereas, if I had said only 'That's a star', its not being Sirius would leave me unshaken. Again, if I had said only, 'That looks like a star', I could have faced with comparative equanimity the revelation that it isn't a star. And so on. Reflections of this kind apparently give rise to the idea that there is or could be a kind of sentence in the utterance of which I take no chances *at all*, my commitment is absolutely minimal; so that in principle *nothing* could show that I had made a mistake, and my remark would be 'incorrigible'.

But in fact this ideal goal is completely unattainable. There isn't, there couldn't be, any kind of sentence which as such is incapable, once uttered, of being subsequently amended or retracted. Ayer himself, though he is prepared to say that sense-datum sentences are incorrigible, takes notice of one way in which they couldn't be; it is, as he admits, always possible in principle that, however non-committal a speaker intends to be, he may produce the *wrong word*, and subsequently be brought to admit this. But Ayer tries, as it were, to laugh this off as a quite trivial qualification; he evidently thinks that he is

conceding here only the possibility of slips of the tongue, purely 'verbal' slips (or of course of lying). But this is not so. There are more ways than these of bringing out the wrong word. I may say 'Magenta' wrongly either by a mere slip, having meant to say 'Vermilion'; or because I don't know quite what 'magenta' means, what shade of colour is called *magenta*; or again, because I was unable to, or perhaps just didn't, really notice or attend to or properly size up the colour before me. Thus, there is always the possibility, not only that I may be brought to admit that 'magenta' wasn't the right word to pick on for the colour before me, but *also* that I may be brought to see, or perhaps remember, that the colour before me just wasn't *magenta*. And this holds for the case in which I say, 'It seems, to me personally, here and now, as if I were seeing something magenta', just as much as for the case in which I say, 'That is magenta.' The first formula may be more cautious, but it isn't *incorrigible*.¹

¹ Ayer doesn't exactly *overlook* the possibility of misdescribing through inattention, failure to notice or to discriminate; in the case of sense-data he tries to *rule it out*. But this attempt is partly a failure, and partly unintelligible. To stipulate that a sense-datum has whatever qualities it appears to have is insufficient for the purpose, since it is *not* impossible to err even in saying only what qualities something appears to have—one may, for instance, not attend to its appearance carefully enough. But to stipulate that a sense-datum just is whatever the speaker takes it to be—so that if he *says* something different it must be a different sense-datum—amounts to making non-mendacious sense-datum statements true by fiat; and if so, how could sense-data be, as they are also meant to be, non-linguistic entities *of* which we are aware, *to* which we refer, that against which the factual truth of all empirical statements is ultimately to be tested?

Yes, but, it may be said, even if such cautious formulae are not *intrinsically* incorrigible, surely there will be plenty of cases in which what we say by their utterance will *in fact* be incorrigible—cases in which, that is to say, nothing whatever could actually be produced as a cogent ground for retracting them. Well, yes, no doubt this is true. But then exactly the same thing is true of utterances in which quite different forms of words are employed. For if, when I make some statement, it is true that nothing whatever could in fact be produced as a cogent ground for retracting it, this can only be because I am in, have got myself into, the very best possible position for making that statement—I have, and am entitled to have, *complete* confidence in it when I make it. But whether this is so or not is not a matter of what *kind of sentence* I use in making my statement, but of what *the circumstances are* in which I make it. If I carefully scrutinize some patch of colour in my visual field, take careful note of it, know English well, and pay scrupulous attention to just what I'm saying, I may say, 'It seems to me now as if I were seeing something pink'; and nothing whatever could be produced as showing that I had made a mistake. But equally, if I watch for some time an animal a few feet in front of me, in a good light, if I prod it perhaps, sniff, and take note of the noises it makes, I may say, 'That's a pig'; and this too will be 'incorrigible', nothing could be produced that would show that I had made a mistake. Once one drops the idea that there is a special *kind of sentence* which is *as such* incorrigible, one might as well admit

(what is plainly true anyway) that *many* kinds of sentences may be uttered in making statements which are *in fact* incorrigible—in the sense that, when they are made, the circumstances are such that they are quite certainly, definitely, and un-retractably *true*.

Consider next the point about evidence—the idea that there is, again, some special kind of sentences whose function it is to formulate the evidence on which other kinds are based. There are at least two things wrong with this.

First, it is not the case, as this doctrine implies, that whenever a 'material-object' statement is made, the speaker must have or could produce evidence for it. This may sound plausible enough; but it involves a gross misuse of the notion of 'evidence'. The situation in which I would properly be said to have *evidence* for the statement that some animal is a pig is that, for example, in which the beast itself is not actually on view, but I can see plenty of pig-like marks on the ground outside its retreat. If I find a few buckets of pig-food, that's a bit more evidence, and the noises and the smell may provide better evidence still. But if the animal then emerges and stands there plainly in view, there is no longer any question of collecting evidence; its coming into view doesn't provide me with more *evidence* that it's a pig, I can now just *see* that it is, the question is settled. And of course I might, in different circumstances, have just seen this in the first place, and not had to bother with collecting evidence at all.¹ Again, if I actually see one man shoot

¹ I have, it will be said, the 'evidence of my own eyes'. But the point of

another, I may *give* evidence, as an eye-witness, to those less favourably placed; but I don't *have* evidence for my own statement that the shooting took place, I actually *saw* it. Once again, then, we find that you have to take into account, not just the words used, but the situation in which they are used; one who says 'It's a pig' will sometimes have evidence for saying so, sometimes not; one can't say that the *sentence* 'It's a pig', as such, is of a kind for which evidence is essentially required.

But secondly, as the case we've considered has already shown, it is not the case that the formulation of evidence is the function of any special sort of sentence. The evidence, if there is any, for a 'material-object' statement will usually be formulated in statements of just the same kind; but in general, *any* kind of statement could state evidence for *any* other kind, if the circumstances were appropriate. It is not true in general, for instance, that general statements are 'based on' singular statements and not vice versa; my belief that *this* animal will eat turnips may be based on the belief that most pigs eat turnips; though certainly, in different circumstances, I might have supported the claim that most pigs eat turnips by saying that this pig eats them at any rate. Similarly, and more relevantly perhaps to the topic of perception, it is not true in general that statements of how things are are 'based on' statements of how things appear, look, or seem and not vice versa. I may say, for instance, 'That pillar is this trope is exactly that it does *not* illustrate the ordinary use of 'evidence'—that I *don't* have evidence in the ordinary sense.

bulgy' on the ground that it looks bulgy; but equally I might say, in different circumstances, 'That pillar looks bulgy'—on the ground that I've just built it, and I *built* it bulgy.

We are now in a position to deal quite briefly with the idea that 'material-object' statements are *as such* not conclusively verifiable. This is just as wrong as the idea that sense-datum statements are as such incorrigible (it is not just 'misleading', as Ayer is prepared to allow that it might be). Ayer's doctrine is that 'the notion of certainty does not apply to propositions *of this kind*'.¹ And his ground for saying this is that, in order to verify a proposition of this kind conclusively, we should have to perform the self-contradictory feat of completing 'an infinite series of verifications'; however many tests we may carry out with favourable results, we can never complete all the possible tests, for these are infinite in number; but nothing *less* than all the possible tests would be *enough*.

Now why does Ayer (and not he alone) put forward this very extraordinary doctrine? It is, of course, not true in general that statements about 'material things', as such, *need* to be 'verified'. If, for instance, someone remarks in casual conversation, 'As a matter of fact I live

¹ He is, incidentally, also wrong, as many others have been, in holding that the 'notion of certainty' *does* apply to 'the *a priori* propositions of logic and mathematics' as such. Many propositions in logic and mathematics are not certain at all; and if many are, that is not just because they are propositions in logic and mathematics, but because, say, they have been particularly firmly established.

in Oxford', the other party to the conversation may, if he finds it worth doing, verify this assertion; but the *speaker*, of course, has no need to do this—he knows it to be true (or, if he is lying, false). Strictly speaking, indeed, it is not just that he has no need to verify his statement; the case is rather that, since he already knows it to be true, nothing whatever that he might do could *count* as his 'verifying' it. Nor need it be true that he is in this position by virtue of having verified his assertion at some previous stage; for of how many people really, who know quite well where they live, could it be said that they have at any time *verified* that they live there? When could they be supposed to have done this? In what way? And why? What we have here, in fact, is an erroneous doctrine which is a kind of mirror-image of the erroneous doctrine about evidence we discussed just now; the idea that statements about 'material things' *as such* need to be verified is just as wrong as, and wrong in just the same way as, the idea that statements about 'material things' *as such* must be based on evidence. And both ideas go astray, at bottom, through the pervasive error of neglecting *the circumstances in which* things are said—of supposing that *the words alone* can be discussed, in a quite general way.

But even if we agree to confine ourselves to situations in which statements can be, and do need to be, verified, the case still looks desperate. Why on earth should one think that such verification can't ever be conclusive? If, for instance, you tell me there's a telephone in the next

room, and (feeling mistrustful) I decide to verify this, how could it be thought *impossible* for me to do this conclusively? I go into the next room, and certainly there's something there that looks exactly like a telephone. But is it a case perhaps of *trompe l'oeil* painting? I can soon settle that. Is it just a dummy perhaps, not really connected up and with no proper works? Well, I can take it to pieces a bit and find out, or actually use it for ringing somebody up—and perhaps get them to ring me up too, just to make sure. And of course, if I do all these things, I *do* make sure; what more could possibly be required? This object has already stood up to amply enough tests to establish that it really is a telephone; and it isn't just that, for everyday or practical or ordinary purposes, enough is *as good as* a telephone; what meets all these tests just *is* a telephone, no doubt about it.

However, as is only to be expected, Ayer has a reason for taking this extraordinary view. He holds, as a point of general doctrine, that, though in his view statements about 'material things' are never strictly equivalent to statements about sense-data, yet 'to say anything about a material thing is to say something, but not the same thing about classes of sense-data'; or, as he sometimes puts it, a statement about a 'material thing' *entails* 'some set of statements or other about sense-data'. But—and this is his difficulty—there is no *definite* and *finite* set of statements about sense-data entailed by any statement about a 'material thing'. Thus, however assiduously I check up on the sense-datum statements entailed by a statement

about a 'material thing', I can never exclude the possibility that there are *other* sense-datum statements, which it also entails, but which, if checked, would turn out to be untrue. But of course, if a statement may be found to entail a false statement, then it itself may thereby be found to be false; and this is a possibility which, according to the doctrine, cannot in principle be finally eliminated. And since, again according to the doctrine, verification just consists in thus checking sense-datum statements, it follows that verification can *never* be conclusive.¹

Of the many objectionable elements in this doctrine, in some ways the strangest is the use made of the notion of entailment. What does the sentence, 'That is a pig', entail? Well, perhaps there is somewhere, recorded by some zoological authority, a statement of the necessary and sufficient conditions for belonging to the species *pig*. And so perhaps, if we use the word 'pig' strictly in that sense, to say of an animal that it's a pig will entail that it satisfies those conditions, whatever they may be. But clearly it isn't this sort of entailment that Ayer has in mind; nor, for that matter, is it particularly relevant to the use that non-experts make of the word 'pig'.² But what other kind of entailment is there? We have a pretty rough idea what pigs look like, what they smell and sound

¹ Material things are put together like jig-saw puzzles; but since the number of pieces in a puzzle is not finite, we can never know that any puzzle is perfect, there may be pieces missing or pieces that won't fit.

² Anyway, the official definition won't cover *everything*—freaks, for instance. If I'm shown a five-legged pig at a fair, I can't get my money back on the plea that being a pig entails having only four legs.

like, and how they normally behave; and no doubt, if something didn't look at all right for a pig, behave as pigs do, or make pig-like noises and smells, we'd say that it wasn't a pig. But are there—do there *have* to be—*statements* of the form, 'It looks . . .', 'It sounds . . .', 'It smells . . .', of which we could say straight off that 'That is a pig' entails them? Plainly not. We learn the word 'pig', as we learn the vast majority of words for ordinary things, ostensibly—by being told, in the presence of the animal, 'That is a pig'; and thus, though certainly we learn what sort of thing it is to which the word 'pig' can and can't be properly applied, we don't go through any kind of intermediate stage of relating the word 'pig' to a lot of *statements* about the way things look, or sound, or smell. The word is just not introduced into our vocabulary in this way. Thus, though of course we come to have certain expectations as to what will and won't be the case when a pig is in the offing, it is wholly artificial to represent these expectations in the guise of *statements* entailed by 'That is a pig.' And for just this reason it is, at best, wholly artificial to speak as if *verifying* that some animal is a pig consists in checking up on the statements entailed by 'That is a pig.' If we do think of verification in this way, certainly difficulties abound; we don't know quite where to begin, how to go on, or where to stop. But what this shows is, not that 'That is a pig' is very difficult to verify or incapable of being conclusively verified, but that this is an impossible travesty of verification. If the procedure of verification were rightly described in this

way, then indeed we couldn't say just what would constitute conclusive verification that some animal was a pig. But this doesn't show that there is actually any difficulty at all, usually, in verifying that an animal is a pig, if we have occasion to do so; it shows only that what verification *is* has been completely misrepresented.¹

We may add to this the rather different but related point that, though certainly we have more or less definite views as to what objects of particular kinds will and won't do, and of how they will and won't re-act in one situation or another, it would again be grossly artificial to represent these in the guise of definite entailments. There are vast numbers of things which I take it for granted that a telephone won't do, and doubtless an infinite number of things which it never enters my head to consider the possibility that it might do; but surely it would be perfectly absurd to say that 'This is a telephone' entails the whole galaxy of statements to the effect that it doesn't and won't do these things, and to conclude that I haven't *really* established that anything is a telephone until, *per impossibile*, I have confirmed the whole infinite

¹ Another way of showing that 'entailment' is out of place in such contexts: Suppose that tits, all the tits we've ever come across, are bearded, so that we are happy to say 'Tits are bearded.' Does this entail that what isn't bearded isn't a tit? Not really. For if beardless specimens are discovered in some newly explored territory, well, of course we weren't talking about *them* when we said that tits were bearded; we now have to think again, and recognize perhaps this new species of glabrous tits. Similarly, what we say nowadays about tits just doesn't refer *at all* to the prehistoric eo-tit, or to remote future tits, defeathered perhaps through some change of atmosphere.

class of these supposed entailments. Does 'This is a telephone' entail 'You couldn't eat it'? Must I try to eat it, and fail, in the course of making sure that it's a telephone?¹

The conclusions we have reached so far, then, can be summed up as follows:

1. There is no *kind* or *class* of sentences ('propositions') of which it can be said that *as such*
 - (a) they are incorrigible;
 - (b) they provide the evidence for other sentences; and
 - (c) they must be checked in order that other sentences may be verified.
2. It is not true of sentences about 'material things' that *as such*
 - (a) they must be supported by or based on evidence;
 - (b) they stand in need of verification; and
 - (c) they cannot be conclusively verified.

Sentences in fact—as distinct from *statements made in particular circumstances*—cannot be divided up *at all* on these principles, into two groups or any other number of groups. And this means that the general doctrine about

¹ Philosophers, I think, have taken too little notice of the fact that most words in ordinary use are defined ostensively. For example, it has often been thought to be a puzzle why A *can't* be B, if being A doesn't entail being not-B. But it is often just that 'A' and 'B' are brought in as ostensively defined as, words for *different things*. Why can't a Jack of Hearts be a Queen of Spades? Perhaps we need a new term, 'ostensively analytic'.

knowledge which I sketched at the beginning of this section, which is the real bugbear underlying doctrines of the kind we have been discussing, is *radically* and *in principle* misconceived. For even if we were to make the very risky and gratuitous assumption that what some particular person knows at some particular place and time could systematically be sorted out into an arrangement of foundations and super-structure, it would be a mistake in principle to suppose that the same thing could be done for knowledge *in general*. And this is because there *could* be no *general* answer to the questions what is evidence for what, what is certain, what is doubtful, what needs or does not need evidence, can or can't be verified. If the Theory of Knowledge consists in finding grounds for such an answer, there is no such thing.

Before leaving this topic, though, there is one more doctrine about the 'two languages' that we ought to consider. This final doctrine is wrong for reasons not quite the same as those we have just been discussing, and it has a certain interest in its own right.

It is not very easy to say just what the doctrine is, so I shall give it in Ayer's own words (with my italics). He says for instance: 'Whereas the meaning of a sentence which refers to a sense-datum is *precisely determined* by the rule that correlates it with the sense-datum in question, such *precision* is not attainable in the case of a sentence which refers to a material thing. For the proposition which such a sentence expresses differs from a proposition about a sense-datum in that there are no observable facts

that constitute both a necessary and sufficient condition of its truth.'¹ And again: '... one's references to material things are *vague* in their application to phenomena....'² Well, perhaps it isn't very clear just what is meant by these remarks; still, it is clear enough that what is being said is that statements about sense-data—all such statements—are, in some way or in some sense, *precise*, while by contrast statements about material things are—all are—*vague* in some sense or some way. It is, for a start, difficult to see how this could be true. Is 'Here are three pigs' a vague statement? Is 'It seems to me as if I were seeing something sort of pinkish' *not* vague? Is the second statement *necessarily* precise in a way in which the first just couldn't be? And isn't it surprising that precision should be paired off with *incorrigibility*, vagueness with *impossibility of verification*? After all we speak of people 'taking refuge' in vagueness—the more precise you are, in general the more likely you are to be wrong, whereas you stand a good chance of *not* being wrong if you make it vague enough. But what we really need to do here is to take a closer look at 'vague' and 'precise' themselves.

'Vague' is itself vague. Suppose that I say that something, for instance somebody's description of a house, is vague; there is a quite large number of possible features—*not* necessarily defects, that depends on what is wanted—any or all of which the description might have and which

¹ Ayer, *op. cit.*, p. 110. 'Observable facts' here, as so often, means, and can only mean, 'facts about sense-data'.

² Ayer, *op. cit.*, p. 242.

might lead me to pronounce it vague. It might be (a) a *rough* description, conveying only a 'rough idea' of the thing to be described; or (b) *ambiguous* at certain points, so that the description would fit, might be taken to mean, either this or that; or (c) *imprecise*, not precisely specifying the features of the thing described; or (d) not very *detailed*; or (e) couched in *general terms* that would cover a lot of rather different cases; or (f) not very *accurate*; or perhaps also (g) not very *full*, or *complete*. A description might, no doubt, exhibit all these features at once, but clearly they can also occur independently of each other. A rather rough and incomplete description may be quite accurate as far as it goes; it may be detailed but very imprecise, or quite unambiguous but still very general. In any case, it is clear enough that there is not just *one* way of being vague, or one way of being not vague, viz. being *precise*.

Usually it is *uses* of words, not words themselves, that are properly called 'vague'. If, for instance, in describing a house, I say among other things that it has a roof, my not saying what kind of roof it has may be one of the features which lead people to say that my description is a bit vague; but there seems no good reason why the word 'roof' itself should be said to be a vague *word*. Admittedly there are different kinds of roofs, as there are different kinds of pigs and policemen; but this does not mean that all uses of 'roof' are such as to leave us in some doubt as to just what is meant; sometimes we may wish the speaker to be 'more precise', but for this there would

presumably be some special reason. This feature of being applicable over a considerable range of non-identical instances is, of course, enormously common; far more words exhibit it than, I think, we should want to label as, in general, vague *words*. Again, almost any word may land us in difficulty over marginal cases; but this again is not enough to make a charge of vagueness stick. (Incidentally the reason why many words exhibit these features is not that they occur in 'material-object' language, but that they occur in *ordinary* language, where excessive nicety of distinction would be positively tiresome; they stand in contrast, not with 'sense-datum' words, but with the special terminologies of the 'exact sciences'.) There are, however, a few notoriously useless words—'democracy', for instance—uses of which are always liable to leave us in real doubt what is meant; and here it seems reasonable enough to say that the *word* is vague.

The classic stamping-ground of 'precise' is the field of *measurement*; here, being precise is a matter of using a sufficiently finely graduated scale. '709.864 feet' is a very precise answer to the question how long the liner is (though it might not be accurate). *Words* may be said to be precise when, as one may put it, their application is fixed within narrow limits; 'duck-egg blue' is at least a *more* precise term than 'blue'. But there is, of course, no general answer to the question how finely graduated a scale must be, or how narrowly determined the application of a word, for precision to be achieved—partly because there is no terminus to the business of making ever

finer divisions and discriminations, and partly because what is precise (enough) for some purposes will be much too rough and crude for others. A description, for example, can no more be absolutely, finally, and ultimately precise than it can be absolutely *full* or *complete*.

'Precisely' can be, and should be, distinguished from 'exactly'. If I measure a banana with a ruler, I may find it to be precisely $5\frac{1}{2}$ inches long. If I measure my ruler with bananas, I may find it to be exactly six bananas long, though I couldn't claim any great precision for my method of measurement. If I have to divide a load of sand into three equal parts, having no means of weighing it, I can't do it *precisely*. But if I have to divide a pile of 26 bricks into three equal piles, I can't do it *exactly*. One might say there is something exciting, specially noteworthy, where 'exactly' is used—its being *exactly* two o'clock has, so to speak, better news-value than its being three minutes past; and there's a kind of exhilaration in finding the *exact word* (which may not be a precise word).

Then what about 'accurate'? Plainly enough, neither a word nor a sentence can, as such, be accurate. Consider maps, for instance, where accuracy is most comfortably at home; an accurate map is not, so to speak, a *kind* of map, as for instance is a large-scale, a detailed, or a clearly drawn map—its accuracy is a matter of the *fit* of the map to the terrain it is a map of. One is tempted to say that an accurate report, for instance, must be *true* whereas a very precise or detailed report may not be; and there is something right in this idea, though I feel rather uneasy

about it. Certainly 'untrue but accurate' is pretty clearly wrong; but 'accurate and therefore true' doesn't seem quite right either. Is it only that 'true', after 'accurate', is redundant? It would be worth while to compare here the relation of 'true' to, say, 'exaggerated'; if 'exaggerated' and *therefore* untrue' seems not quite right, one might try 'untrue in the sense that it's exaggerated', 'untrue, or rather, exaggerated', or 'to the extent that it's exaggerated, untrue'. Of course, just as no word or phrase is accurate as such, no word or phrase is as such an exaggeration. Here, though, we are digressing.

What are we to make, then, of the idea that sentences about sense-data are as such precise, while sentences about 'material things' are intrinsically vague? The second part of this doctrine is intelligible, in a way. What Ayer seems to have in mind is that being a cricket-ball, for instance, does not entail being looked at rather than felt, looked at in any special light or from any particular distance or angle, felt with the hand rather than the foot, &c. . . . This of course is perfectly true; and the only comment required is that it constitutes no ground at all for saying that 'That is a cricket-ball' is vague. Why should we say that it is vague 'in its application to phenomena'? The expression is surely not meant to 'apply to phenomena'. It is meant to identify a particular kind of ball—a kind which is, in fact, quite *precisely* defined—and this it does perfectly satisfactorily. What would the speaker make of a request to be *more* precise? Incidentally, as has been pointed out before, it would be a mistake

to assume that greater precision is always an improvement; for it is, in general, more difficult to be more precise; and the more precise a vocabulary is, the less easily adaptable it is to the demands of novel situations.

But the first part of the doctrine is much less easy to understand. By saying that 'the meaning of a sentence which refers to a sense-datum is precisely determined by the rule that correlates it with *the sense-datum* in question', Ayer can hardly mean that such a sentence can refer only to *one particular* sense-datum; for if this were so there could be no sense-datum *language* (but only, I suppose, 'sense-datum names'). On the other hand, why on earth should it be true *in general* that expressions used in referring to sense-data should be precise? A difficulty here is that it is never really made clear whether Ayer regards the 'sense-datum language' as something which already exists and which we use, or whether he thinks of it as a merely possible language which could in principle be invented; for this reason one never knows quite what one is supposed to be considering, or where to look for examples. But this scarcely matters for the present purpose; whether we are to think of an existent or an artificial language, there is in any case no necessary connexion between reference to sense-data and *precision*; the classificatory terms to be used might be extremely rough and general, why ever not? It is true presumably that reference to sense-data couldn't be 'vague in its application to phenomena' in *just the way* Ayer holds that reference to 'material things' *must* be; but then this isn't really a

way of being vague. And even if it had been, it is still pretty obvious that avoidance of it would not guarantee precision. There are more ways of being vague than one.

Thus, to the summary we set out a few pages ago we can now add this: there is no reason to say that expressions used in referring to 'material things' are (as such, intrinsically) vague; and there is no reason to suppose that expressions used in referring to 'sense-data' would be (as such, necessarily) precise.